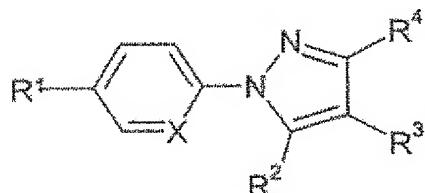


The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A compound of Compounds of the formula I



I

in which

R<sup>1</sup> denotes H, A, Hal, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms, CF<sub>3</sub>, NO<sub>2</sub>, CN, C(NH)NOH or OCF<sub>3</sub>,

R<sup>2</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms or CF<sub>3</sub>,

R<sup>3</sup>, R<sup>4</sup> denote H, (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>R<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>COHet, CHO, (CH<sub>2</sub>)<sub>n</sub>OR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)<sub>2</sub>, CH=N-OA, CH<sub>2</sub>CH=N-OA, (CH<sub>2</sub>)<sub>n</sub>NHOA, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)Het, (CH<sub>2</sub>)<sub>n</sub>CH=N-Het, (CH<sub>2</sub>)<sub>n</sub>OOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>CH=N-Het, (CH<sub>2</sub>)<sub>n</sub>OOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>OR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>OCF<sub>3</sub>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)C(R<sup>5</sup>)HOOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)C(R<sup>5</sup>)HOOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>COHet, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>N(R<sup>5</sup>)CH<sub>2</sub>OOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>N(R<sup>5</sup>)CH<sub>2</sub>OOOR<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>N(R<sup>5</sup>)<sub>2</sub>, CH=CHCOOR<sup>5</sup>, CH=CHCH<sub>2</sub>NR<sup>5</sup>Het, CH=CHCH<sub>2</sub>N(R<sup>5</sup>)<sub>2</sub>, CH=CHCH<sub>2</sub>OR<sup>5</sup> or (CH<sub>2</sub>)<sub>n</sub>N(R<sup>5</sup>)Ar, where in each case one of the radicals R<sup>3</sup> or R<sup>4</sup> denotes H,

R<sup>5</sup> denotes H or A,

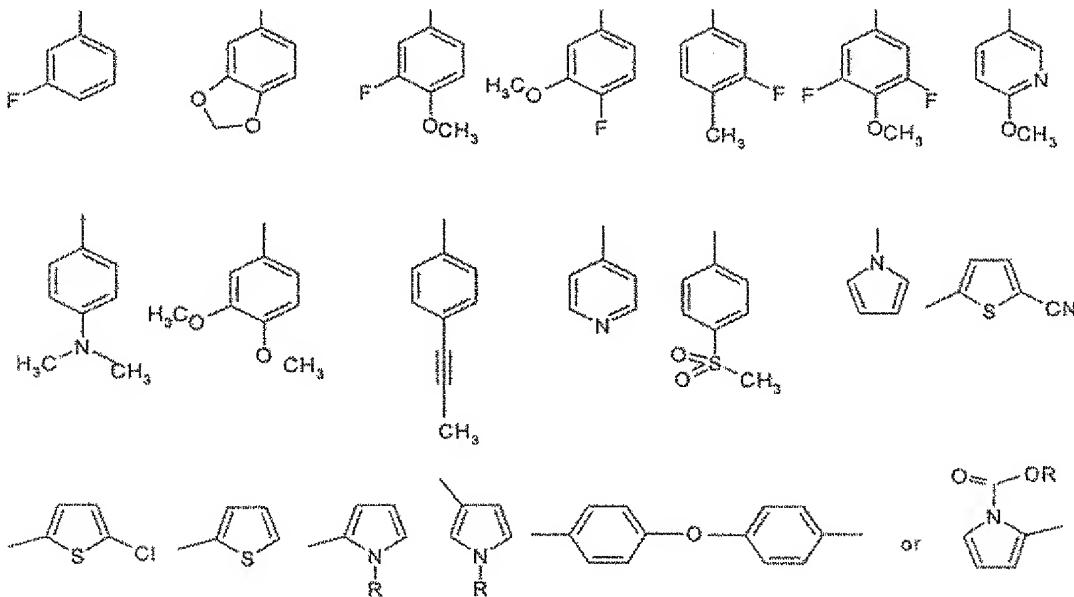
A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

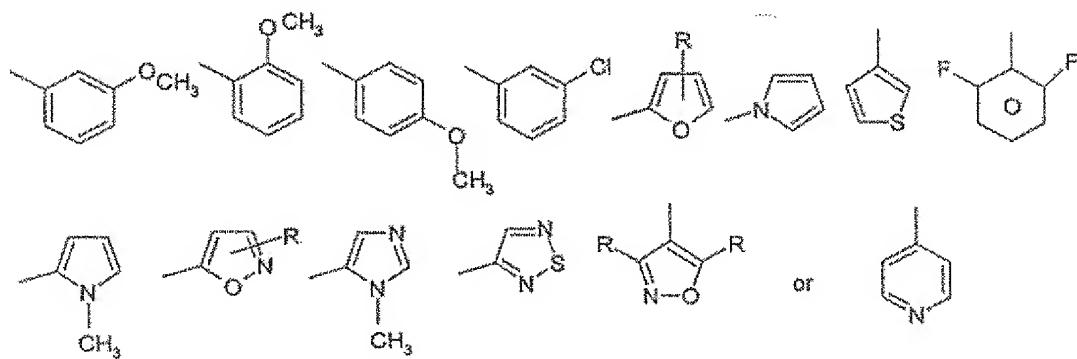
Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,

n denotes 0, 1, 2, 3, 4 or 5,  
 Hal denotes F, Cl, Br or I, and  
 X denotes N<sub>2</sub> or [[<sub>2</sub>]]

in the case where R<sup>1</sup> denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
 and/or R<sup>2</sup> has one of the following meanings:



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
 alternatively denotes CH,  
or a salt, solvate, enantiomer, racemate, mixture of enantiomers, or a pharmaceutically

acceptable salt or solvate thereof

~~and salts and solvates, enantiomers, and racemates thereof and other mixtures of the enantiomers, in particular physiologically tolerated salts and solvates thereof.~~

2. (Currently Amended)

A compound of Compounds of the

formula I according to Claim 1, in which  $R^1$  denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, -dichloro- or -dicyanophenyl, 3,4,5-trifluorophenyl, 3,4,5-trimethoxy- or -triethoxyphenyl, thiophen-2-yl or thiophen-3-yl.

3. (Currently Amended)

A compound of Compounds of the

formula I according to claim 1, in which  $R^3$  denotes H.

4. (Currently Amended)

A compound of Compounds of the

formula I according to claim 1, in which  $R^4$  denotes H.

5. (Currently Amended)

A compound of Compounds of the

formula I according to claim 1, in which  $R^2$  denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3 or 4-fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5- or 2,6-difluoro- or -dicyanophenyl, thiophen-2-yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, or 2- or 3-pyrazinyl.

6. (Currently Amended)

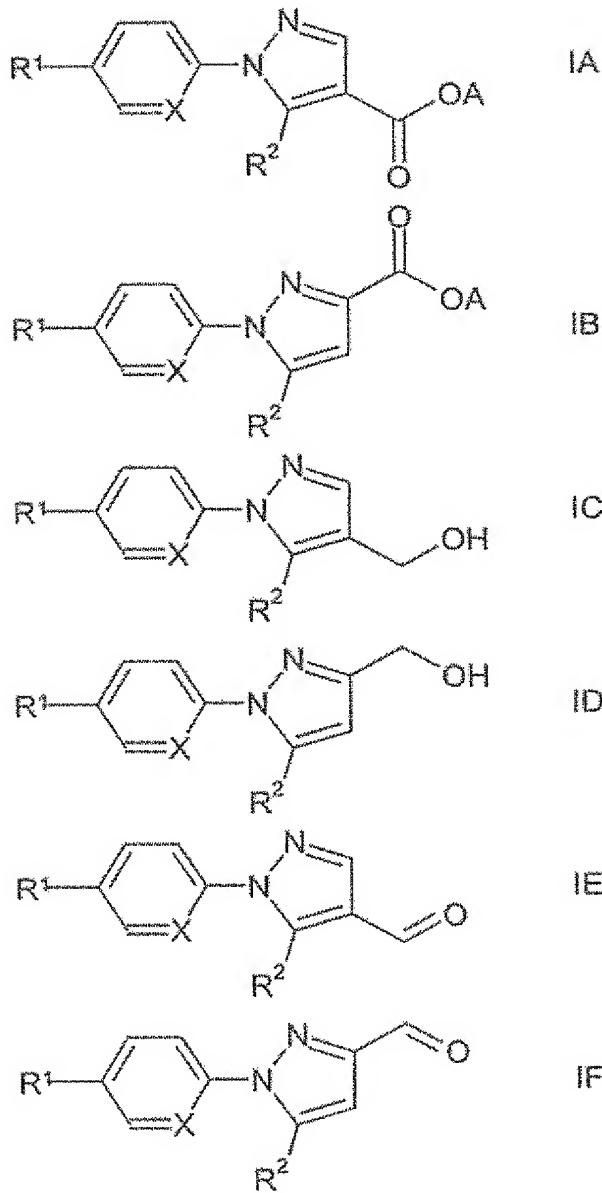
A compound of Compounds of the

formula I according to claim 1, in which X denotes N.

7. (Currently Amended)

A compound of formula Compounds of

~~the formulae IA, IB, IC, ID, IE or IF and IF:~~



in which

R<sup>1</sup>, R<sup>2</sup> and X have the meanings indicated in Claim 1

R<sup>1</sup> denotes H, A, Hal, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms, CF<sub>3</sub>, NO<sub>2</sub>, CN, C(NH)NOH or OCF<sub>3</sub>,

R<sup>2</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms or CF<sub>3</sub>,

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,

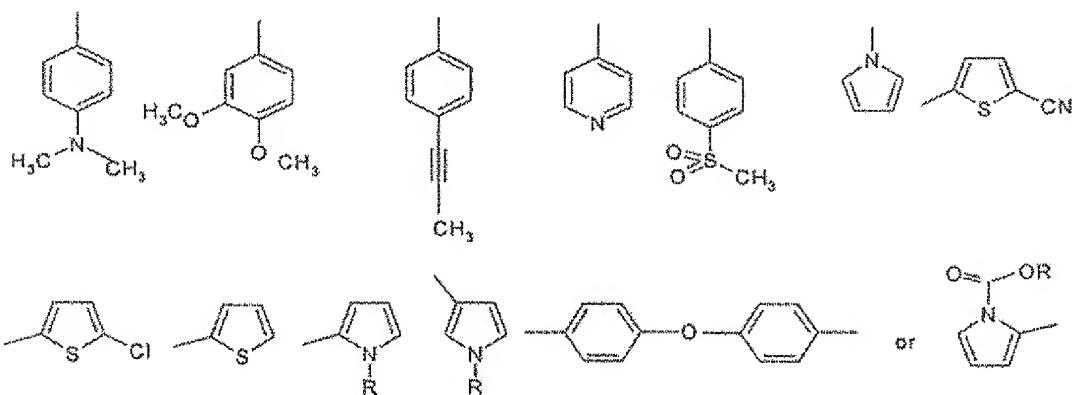
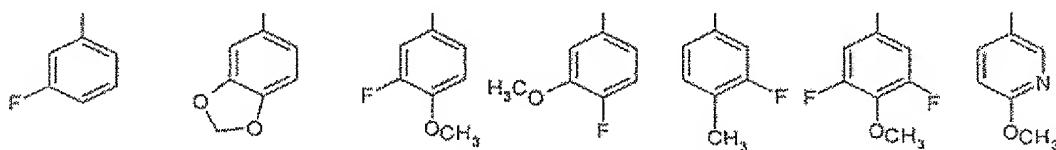
R<sup>5</sup> denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

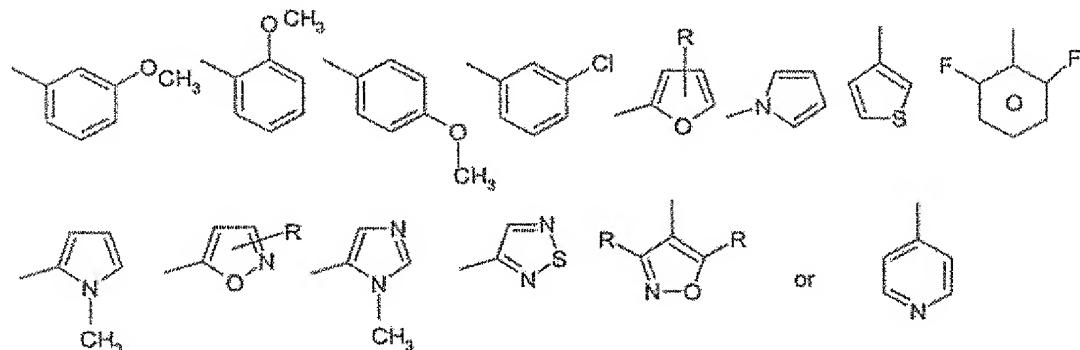
Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R<sup>1</sup> denotes

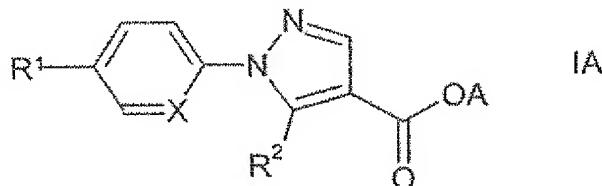


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
and/or R<sup>2</sup>

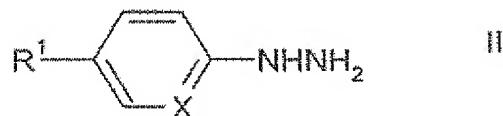


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH,  
or a salt or solvate thereof.

8. (Currently Amended) A process for preparing a compound of  
Process for the preparation of compounds of the formula IA according to claim 7

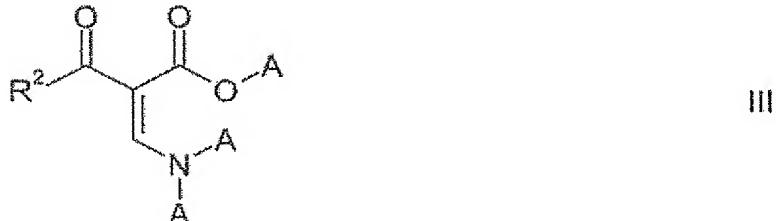


in which R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, X and A have the meanings indicated in Claim 1, and salts and  
solvates thereof, which is characterised in that comprising reacting a compound of the  
formula II



or an acid-addition salt salts thereof, in which  
R<sup>1</sup> and X have the meanings indicated for the compound of formula IA, in Claim 1, is  
reacted

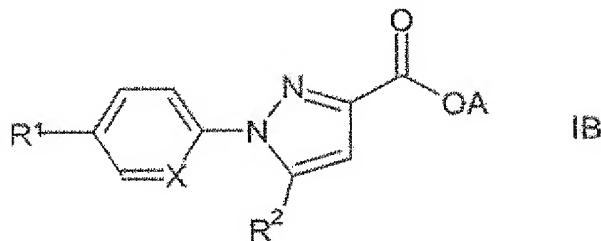
with a compound of the formula III



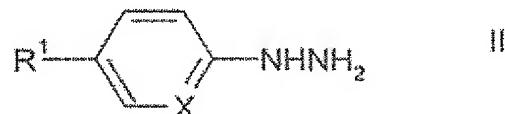
in which  
A and R<sup>2</sup> have the meanings indicated for the compound of formula IA in Claim 1,  
and/or in that

a basic compound of the formula IA is converted into one of its salts by treatment with an acid.

9. (Currently Amended) A process for preparing a compound of  
Process for the preparation of compounds of the formula IB according to claim 7

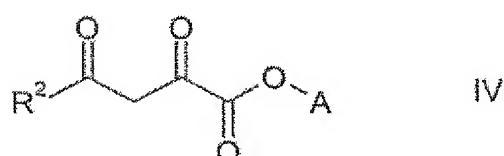


in which R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, X and A have the meanings indicated for the compound of  
formula IB, in Claim 1, and salts and solvates thereof, which is characterised in that  
comprising reacting a compound of the formula II



or an acid-addition salt salts thereof, in which  
R<sup>1</sup> and X have the meanings indicated for the compound of formula IB, in Claim 1, is  
reacted

with a compound of the formula IV



in which

A and R<sup>2</sup> have the meanings indicated for the compound of formula IB in Claim 1,  
and/or in that

a basic compound of the formula IB is converted into one of its salts by treatment with an acid.

10. (Currently Amended) A pharmaceutical composition comprising a compound of Compounds of the formula I according to claim 1 and a pharmaceutically acceptable carrier and physiologically acceptable salts and solvates thereof as medicaments.

11. (Currently Amended) A method Use of the compounds of the formula I according to claim 1, and salts and solvates thereof, for the preparation of a medicament for the treatment or and prophylaxis of a disease diseases which can be influenced by the binding of a compound of the compounds of the formula I to 5 HT receptors, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.

12. (Currently Amended) A method for antagonizing a 5-HT receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10 Use of compounds of the formula I according to claim 1 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT receptor antagonistic action.

13. (Currently Amended) A method for antagonizing a 5-HT2A receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10 Use of compounds of the formula I according to claim 1 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT2A receptor antagonistic action.

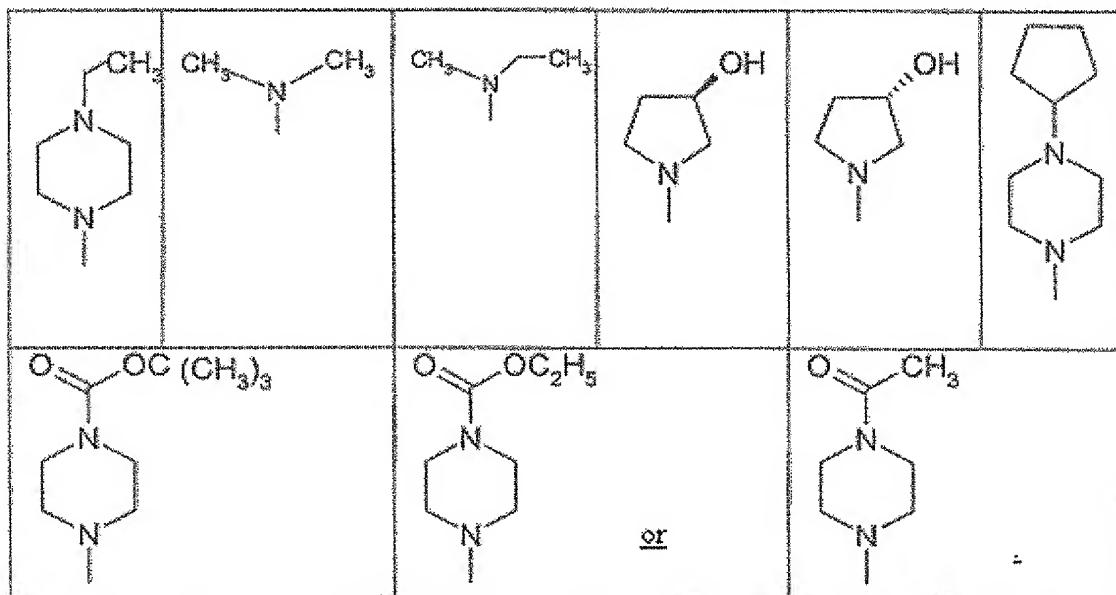
14. (Cancelled)

15. (Currently Amended) A process for preparing a pharmaceutical composition according to claim 10, comprising mixing together Process for the preparation of pharmaceutical compositions, characterised in that a compound of the formula I and a pharmaceutically acceptable carrier according to Claim 1 and/or one of its physiologically acceptable salts and/or one of its solvates is converted into a suitable dosage form together with at least one solid, liquid or semi-liquid excipient or adjuvant.

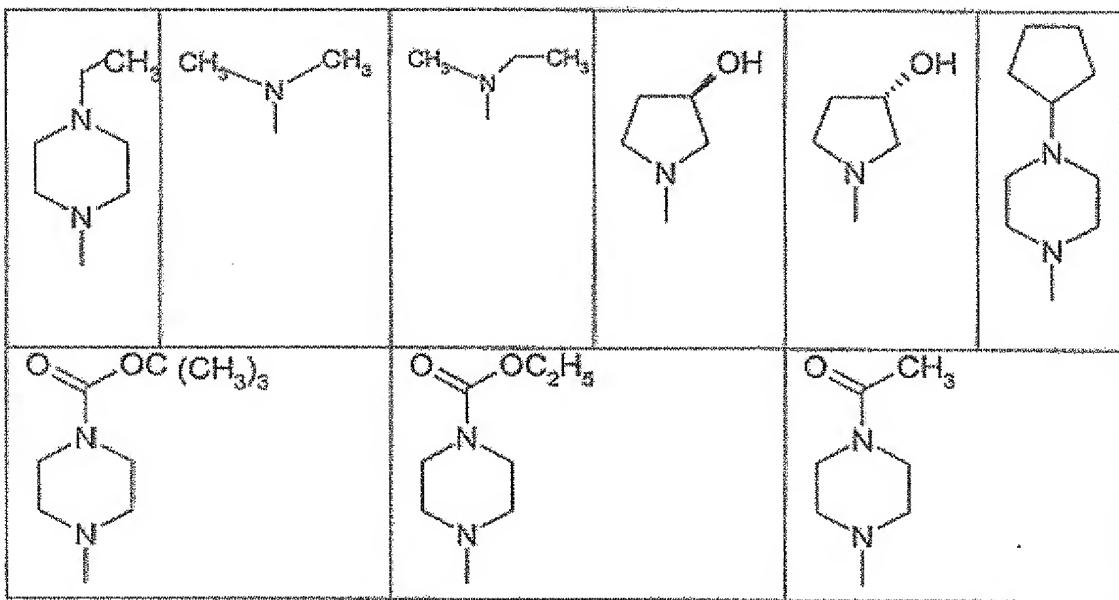
16. (Currently Amended) A method Use of compounds of the formula I

according to claim 1 and/or physiologically acceptable salts or solvates thereof for the preparation of a medicament for the prophylaxis and/or treatment of psychoses, a neurological disorder disorders, amyotrophic lateral sclerosis, eating disorder disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10 (OCD).

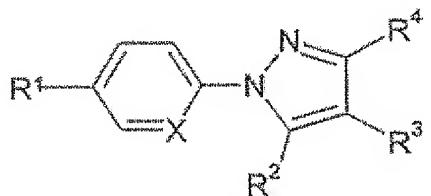
17. (Currently Amended) A compound of claim 1, Compounds of the formula I in which Het is one of the following radicals:



18. (New) A compound of claim 7, in which Het is



19. (New) A compound of formula I according to claim 1



in which

$R^1$  denotes H, A, Hal,  $(CH_2)_n$ Het,  $(CH_2)_n$ Ar, cycloalkyl having 3 to 7 C atoms,  $CF_3$ ,  $NO_2$ , CN,  $C(NH)NOH$  or  $OCF_3$ ,

$R^2$  denotes  $(CH_2)_n$ Het,  $(CH_2)_n$ Ar, cycloalkyl having 3 to 7 C atoms or  $CF_3$ ,

$R^3, R^4$  denote H,  $(CH_2)_nCO_2R^5$ ,  $(CH_2)_nCOH$ et, CHO,  $(CH_2)_nOR^5$ ,  $(CH_2)_n$ Het,  $(CH_2)_nN(R^5)_2$ ,  $CH=N-OA$ ,  $CH_2CH=N-OA$ ,  $(CH_2)_nNHOA$ ,  $(CH_2)_nN(R^5)Het$ ,  $(CH_2)_nCH=N-Het$ ,  $(CH_2)_nOOOR^5$ ,  $(CH_2)_nN(R^5)CH_2CH_2OR^5$ ,

$(CH_2)_nN(R^5)CH_2CH_2OCF_3$ ,  $(CH_2)_nN(R^5)C(R^5)HOOOR^5$ ,

$(CH_2)_nN(R^5)CH_2COH$ et,  $(CH_2)_nN(R^5)CH_2$ Het,  $(CH_2)_nN(R^5)CH_2CH_2$ Het,

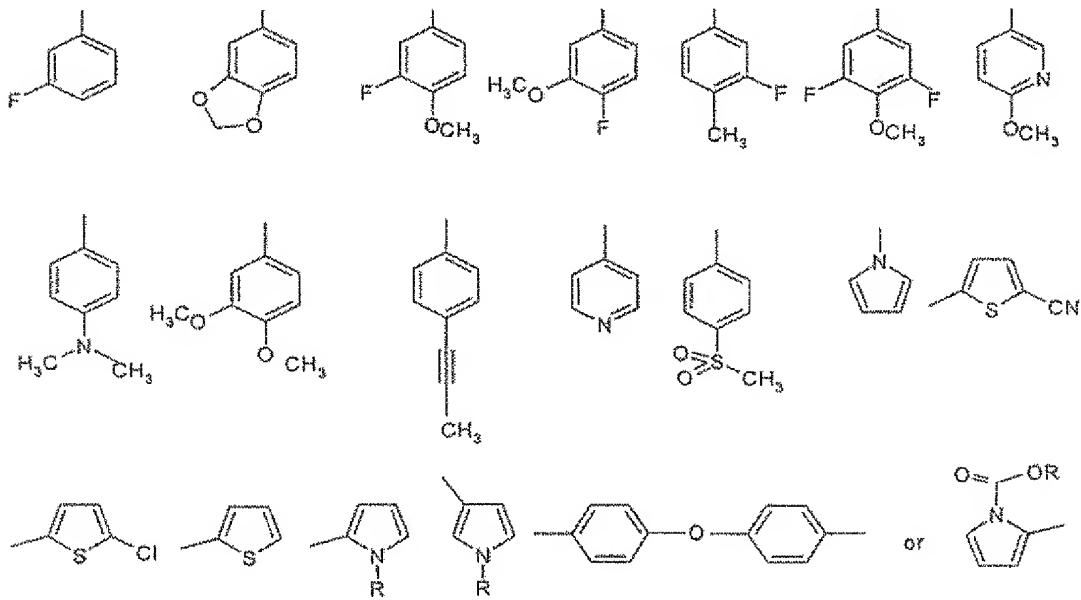
$(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2OOOR^5$ ,  $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$ ,

$CH=CHCOOR^5$ ,  $CH=CHCH_2NR^5$ Het,  $CH=CHCH_2N(R^5)_2$ ,  $CH=CHCH_2OR^5$  or

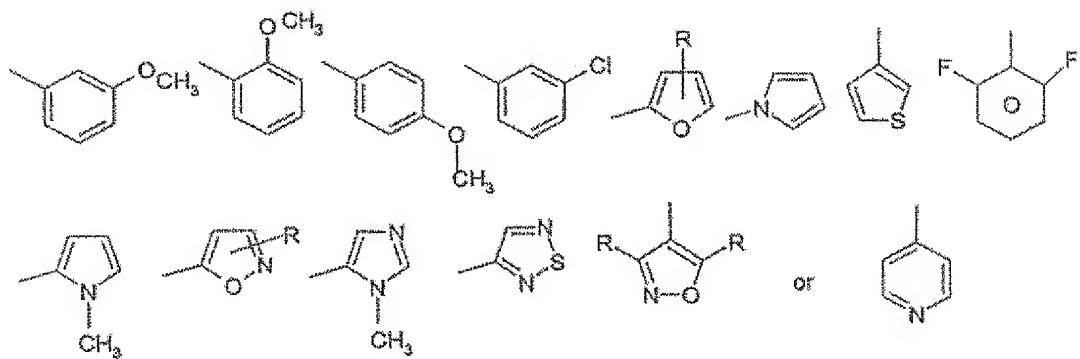
$(CH_2)_nN(R^5)Ar$ , where in each case one of the radicals  $R^3$  or  $R^4$  denotes H,

$R^5$	denotes H or A,
A	denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,
Het	denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,
Ar	denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, $OR^5$ , $OOCR^5$ , $COOR^5$ , $CON(R^5)_2$ , CN, $NO_2$ , $NH_2$ , $NHCOR^5$ , $CF_3$ or $SO_2CH_3$ ,
n	denotes 0, 1, 2, 3, 4 or 5,
Hal	denotes F, Cl, Br or I, and
X	denotes N, or

in the case where  $R^1$  denotes

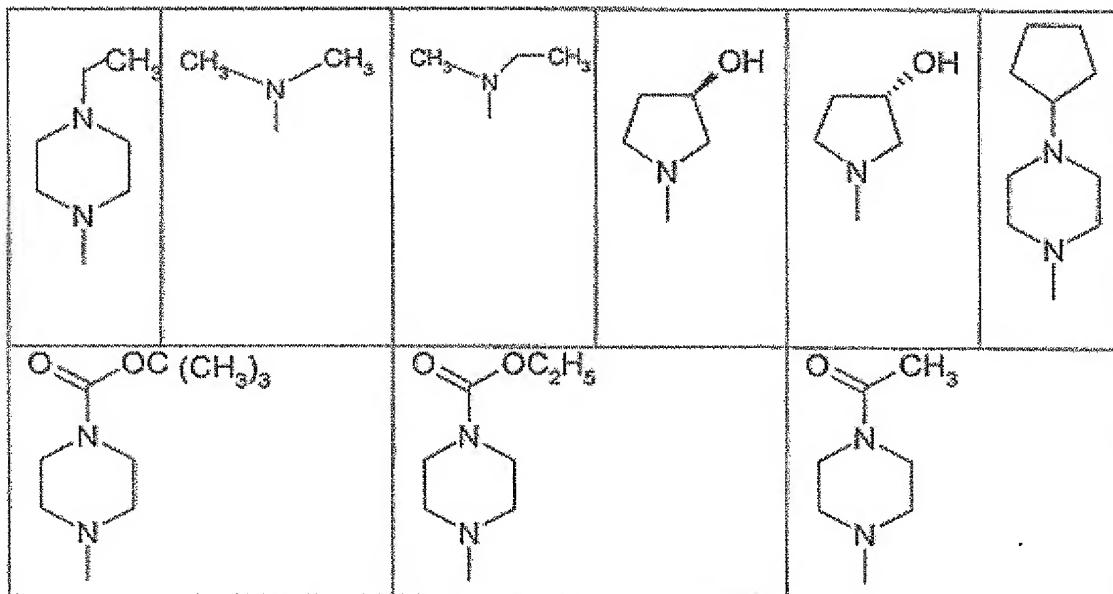


in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or  $R^2$

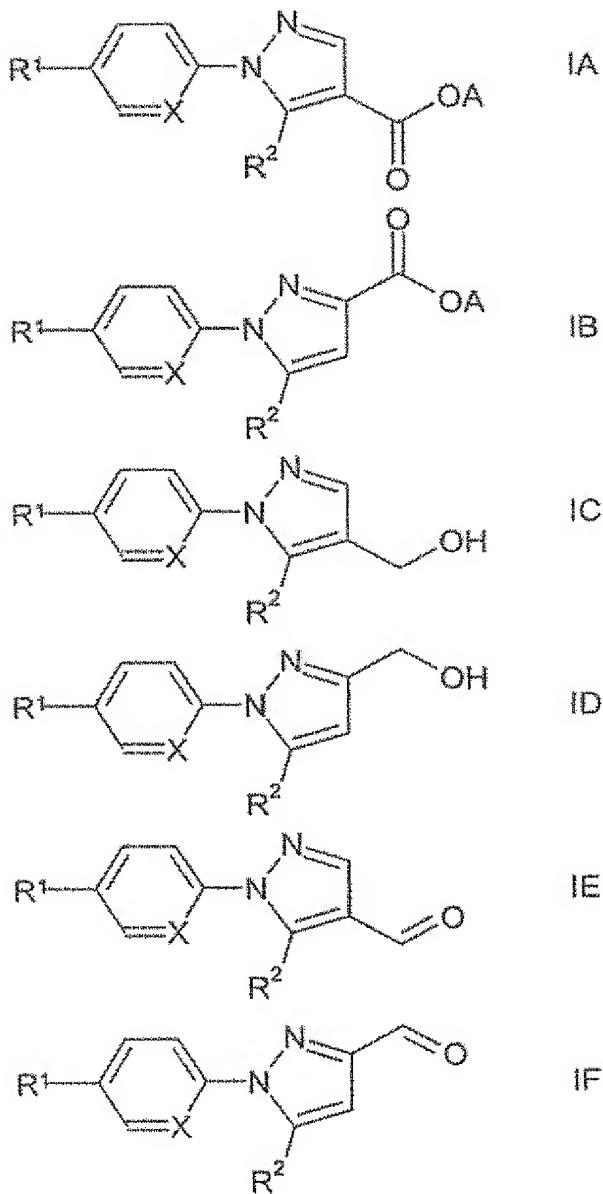


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH,  
or a pharmaceutically acceptable salt thereof.

20. (New) A compound of claim 19, in which Het is



21. (New) A compound of formula IA, IB, IC, ID, IE or IF



in which

R<sup>1</sup> denotes H, A, Hal, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms, CF<sub>3</sub>, NO<sub>2</sub>, CN, C(NH)NOH or OCF<sub>3</sub>,

R<sup>2</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms or CF<sub>3</sub>,

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or

polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,

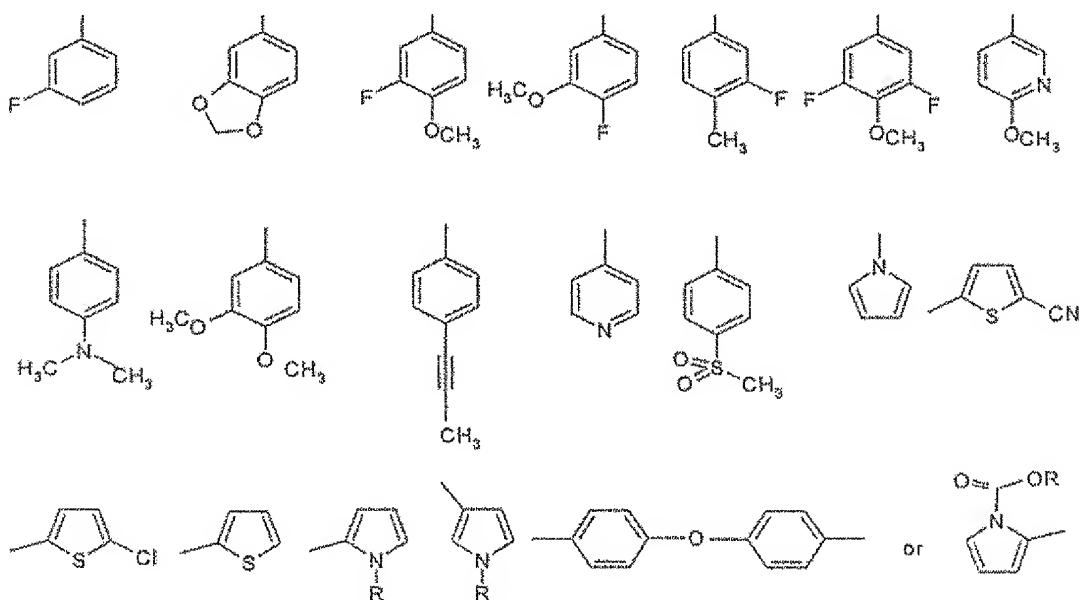
R<sup>5</sup> denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

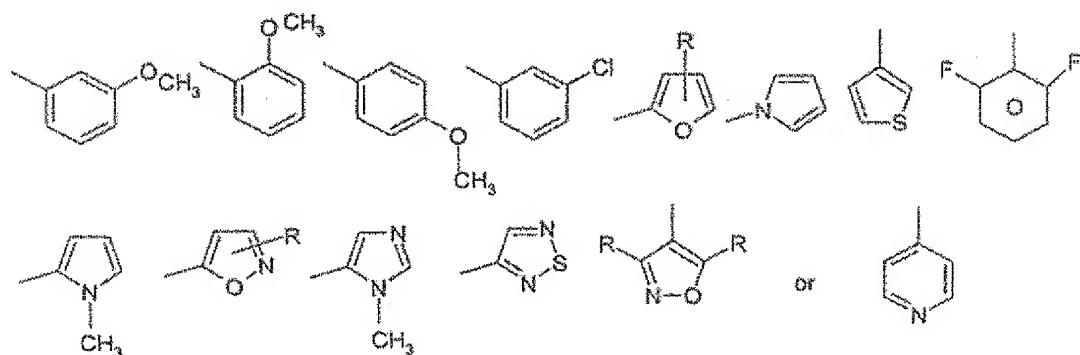
Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R<sup>1</sup> denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or R<sup>2</sup>



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH,  
or a pharmaceutically acceptable salt thereof.

22. (New)

A compound of claim 21, in which Het is

